

CLAIMS

WHAT IS CLAIMED IS:

- 5 1. An interface circuit for operating a capacitive
 load at a mains supply circuit, in particular a
 phase gating dimmer, wherein the interface circuit
 has a first switch, which is designed to short-
10 circuit the input of the load if a mains supply to
 the input of the load is not effected.
2. The interface circuit as claimed in claim 1,
 wherein a first transistor is provided as a switch
 for short-circuiting.
- 15 3. The interface circuit as claimed in one of the
 preceding claims, wherein a second switch is
 furthermore provided, which is designed to cancel
 the short circuit of the input of the load if a
20 mains supply to the input of the load is effected.
4. The interface circuit as claimed in claim 3,
 wherein the second switch is a second transistor.
- 25 5. The interface circuit as claimed in claim 4,
 wherein the base of the second transistor is
 connected to a respective mains-side input of a
 rectifier via a first and a second resistor.
- 30 6. The interface circuit as claimed in one of the
 preceding claims, wherein a control circuit is
 provided, which is designed to evaluate a signal
 generated by the mains supply circuit and to
 generate a signal for controlling the power
35 consumption of the load.
7. The interface circuit as claimed in claim 6,
 wherein the signal of the mains supply circuit is
 the supply voltage.

8. The interface circuit as claimed in either of claims 6 and 7, wherein the control circuit is designed to generate, on the basis of the duty ratio of the switch, a signal proportional thereto for controlling the power consumption of the load.
9. The interface circuit as claimed in one of claims 6 to 8, wherein the control circuit has a parallel circuit comprising a series circuit comprising a third resistor and a third transistor, the base of which is connected to the base of the first transistor, a smoothing capacitor and a fourth resistor, the parallel circuit being connected in series with a fifth resistor, the tap of the control signal for the control of the power consumption of the load being provided between the fourth resistor and the fifth resistor.
10. The interface circuit as claimed in one of the preceding claims, which is embodied separately from load and mains supply in a separate construction.
11. A circuit arrangement for operating capacitive loads, in particular low pressure discharge lamps, at the mains with a phase gating dimmer, which has a power switch and a timing element, and the capacitive load, wherein an interface circuit as claimed in one of claims 1 to 10 is provided between the load and the phase gating dimmer.
12. An electronic ballast for a lamp with an integrated interface circuit as claimed in one of claims 1 to 9 for operating at a phase gating dimmer.